WHAT IS CLAIMED IS:

1. A purified kinase which phosphorylates IκBα at serine residues 32 and 36, the kinase being a complex of approximately 700 kDa molecular weight as determined by gel filtration chromatography or size exclusion chromatography.

2. The kinase according to claim 1, wherein the kinase is purified by chromatographic purification of cell extracts.

3. The kinase according to claim 2, wherein the extracts are cell cytoplasmic extracts.

4. The kinase according to claim 2, wherein the chromatographic purification comprises ion-exchange chromatography and size exclusion chromatography.

5. A method for identifying an agonist for the activity of a kinase which phosphorylates IκBα at serine residues 32 and 36, the method comprising:

(a) contacting a sample comprising a purified kinase which phosphorylates IκBα at serine residues 32 and 36, the kinase being a complex of approximately 700 kDa molecular weight as determined by gel filtration chromatography or size exclusion chromatography, IκBα, and a test substance under conditions in which the kinase phosphorylates IκBα; and

(b) measuring the phosphorylation of IκBα, wherein an increase in the amount of phosphorylation of IκBα in the presence of the test substance compared to the phosphorylation in the absence of the test substance indicates that the test substance is an agonist of the kinase.

6. A method for identifying an antagonist for the activity of a kinase which phosphorylates IκBα at serine residues 32 and 36, the method comprising:

(a) contacting a sample comprising a purified kinase which phosphorylates IκBα at serine residues 32 and 36, the kinase being a complex of approximately 700 kDa

molecular weight as determined by gel filtration chromatography or size exclusion chromatography, IκBα, and a test substance under conditions in which the kinase phosphorylates IκBα; and

(b) measuring the phosphorylation of IκBα, wherein a decrease in the amount of phosphorylation of IκBα in the presence of the test substance compared to the phosphorylation in the absence of the test substance indicates that the test substance is an antagonist of the kinase.